CERTIFICATION

In the Electronics Recycling Industry

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International Association of Electronics Recyclers

Web Site - http://www.iaer.org Email - Info@iaer.org

CERTIFICATION OBJECTIVES

- Support & promote high standards for industry
 - environmental quality
 - regulatory compliance
 - high quality business practices
- Establish formal, objective certification process
 - designation "Certified Electronics Recycler®"
- Provide service to member companies
 - help improve management systems
 - recognition of high quality electronics recyclers

PROGRAM DEVELOPMENT

- 1 Established basic criteria & process
 - Team of IAER Leadership
 - Existing Standards & industry practices
 - Staff/professional support
- 2 Developed details of certification/audit process
 - Audit/Review Committee
 - Service Provider participation
- 3 Conducted pilot test of audit process
- 4. Refined the process & sought buy-in
- 5. Implemented certification program

SERVICE PROVIDER

- Selected group of potential candidate companies
 - Member recommendations
 - Leaders in EHS & Quality auditing
- Rigorous selection process
 - consensus on key selection criteria
 - formal RFP & evaluation of proposals
 - interview of short list of candidates
- Selected world-class accredited Registrar
 - BVQI (WEB SITE http://www.BVQINA.com/)

WHAT IS IAER CERTIFICATION?

INDUSTRY SPECIFIC REQUIREMENTS

BROADER NEEDS OF CUSTOMERS

KEY AREAS OF INTEREST TO STAKEHOLDERS

- PRACTICAL IMPLEMENTATION
 - for Small & Medium-size Enterprises (SMEs)

IAER CERTIFICATION vs. ISO 9001 & 14001

- ISO Quality & Environmental Management Systems requirements generally more than adequate
- IAER Certification unique requirements
 - incremental to ISO in areas such as:
 - Health and Safety (management systems)
 - General Business (e.g., security, financial)
 - Operational Capabilities (e.g., equipment, facilities, personnel/skills, and controls)

BASIC CERTIFICATION PROCESS APPROACH

- Focus on improving management systems
 - not evaluating operational performance
- Recognize existing certifications (e.g., ISO)
- Minimize audit burden to member companies
- Engage objective and qualified third party
 - to provide certification services

BASIC CERTIFICATION PROCESS GENERAL SCOPE

MANAGEMENT SYSTEMS

- Common Elements
 - (e.g., policy, planning, implementation, measurement, review)
- Unique Elements
 - Environment, Health, Safety & Quality

GENERAL BUSINESS

- Management, Finances, Insurance, Security
- OPERATIONAL CAPABILITIES & PROCESSES
 - Operations, Personnel, Facilities, Equipment
 - Control Of Materials Of Concern
 - Downstream Due Diligence And Risk Management
 - Data Security

EXAMPLES FROM IAER STANDARD

- of some General Requirements

Management Systems

- "There shall be corporate commitments, in the form of policies and/or instructions that address the achievement and improvement of high standards of business practices in relation to each of the basic management systems."

General Business

- "There shall be a plan and program for the security of the physical facilities, products and materials assets involved in the operational processes."

Operational Capabilities & Processes

- "There shall be a process for the evaluation and monitoring of key contracted operations in relation to compliance with applicable regulations as well as the adequacy of their management systems."

- of some Specific Requirements

There shall be:

- "evidence of compliance with applicable environmental, health & safety regulations"
- "adequate insurance coverage for potential risks and liabilities associated with the nature and magnitude of the company's operations"
- "evidence that a high percentage of the product received by the company is recycled and not land filled as well as a commitment to continuously improve in this area"
- "a process to control and document the downstream movement of electronic devices or their components until such point that they are reused, recycled, reclaimed or disposed in a manner that supports resource recovery and minimizes negative impacts on human health and the environment"

BASIC CERTIFICATION PROCESS PROCESS STEPS

- 1. IAER Membership criteria
- 2. Pre-screening process: questionnaire
- 3. Audit Preparation: optional service
- 4. Audit: on site review & assessment
- 5. Follow-ups:
 - Audit Report & Recommendations
 - Corrective Action
 - Certification
 - Maintenance (renewal audits every 2 years)

CERTIFICATION READINESS

IAER PRE-SCREENING QUESTIONNAIRE

- Evidence of prior experience with other relevant types of certifications.
- Evidence of relevant corporate policies and procedures.
- Knowledge of applicable legislative and regulatory requirements.
- In general, completing the questionnaire adequately.

FUNDAMENTAL QUESTIONS

- of Audit Process

- Does the company have Management Systems that address key elements of environment, health, safety & quality?
- 2. Does the company exhibit the basic characteristics of a reputable business?
- 3. Does the company have operational capabilities that are consistent with what it claims to be the scope of its business?
- 4. Does the company have adequate controls in place to protect its workers, customers and the environment?

EXAMPLES OF KEY AUDIT FOCUS AREAS

- MANAGEMENT PROCESSES & PROGRAMS
 - Operational Capabilities and Processes
 - Environmental Compliance Licenses and Permits
- DOWNSTREAM DUE DILIGENCE
 - Including export controls
- HEALTH & SAFETY ASPECTS
 - Including handling of "Materials of Concern"
- SECURITY CONSIDERATIONS
 - Including data as well as facilities

IAER CERTIFICATION DOCUMENTS

- Certification Standard
- Application for Certification
- Pre-Assessment Checklist
- Pre-Screening Questionnaire
- Audit Checklist
- Certification Guidance
- Certification Certificate

Program information – including Standard – is available on IAER web site at:

http://www.iaer.org/communications/certification.htm

CHALLENGES

- Buy-in from stakeholder groups:
 - OEMs
 - Government Agencies (federal, state, local)
 - NGOs
- Market forces
 - Customer expectations & requirements
- Recognition vs. ISO
- Time & effort to prepare

PROGRAM STATUS & OUTLOOK

- Certification process refined & updated
 - ongoing process with IAER Committee
 - New cost-efficient process announced in 2006
 - Latest version (Release 2.1) announced 5/7/07
- IAER participation in EPA-facilitated "BMPs"
 - IAER Certification Standard consistent with key elements of BMPs
- Increasing number of electronics recyclers seeking IAER Certification
 - Over 20 facilities have achieved the designation of "Certified Electronics Recycler®"
 - More in the process of preparing or scheduling audits

EPA-FACILITATED PROCESS TO DEVELOP "BEST MANAGEMENT PRACTICES FOR ELECTRONICS RECYCLING" (BMPs)

- Great deal of interest in the certification of electronics recyclers
 - General consensus that there needs to be a certification process for electronics recyclers
- 2 year effort involving multiple stakeholder group
- Developed "General Principles" as well as specific requirements for use in certification programs
- Generated numerous iterations of a draft BMP document to try to converge on consensus
- Follow-up effort proposed on "Implementation"

CERTIFICATION AUDITS - Perspective WHAT YOU MUST HAVE:

- Documentation
 - Policies, procedures & assigned responsibilities
- Awareness
 - Legal & standards requirements
- Communication
 - Buy-in & training
- Programs
 - Goals, objectives, targets & measurements
- Management
 - Commitment, involvement, controls, tracking
- Evidence to demonstrate all of the above

SUMMARY

- Certification is market driven
- There are certifications for different needs
- Focus is on management processes
- Organization, discipline & control are key
- Preparation is critical
- Electronics recycling industry needs to promote best practices

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